

PATENT

Atty. Dkt. No. NVDA P000721

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method for generating a primitive extension, the primitive extension defining the connectivity and vertices used to specify a collection of connected primitives defining within a generalized primitive, comprising:
 providing an originating primitive;
 parameterizing the generalized primitive with parameters that include a width (w), a step size (s) and an anchor width (a);
 ~~providing an originating primitive;~~ and
 generating the primitive extension of the originating primitive responsive to the parameters.
2. (Currently Amended) A method as in claim 1, wherein one of the parameters indicates a number of the vertices to form the originating primitive.
3. (Original) A method as in claim 1, wherein the generalized primitive is a fan-type primitive.
4. (Original) A method as in claim 1, wherein the generalized primitive is a strip-type primitive.
5. (Currently Amended) A method as in claim 1, wherein one of the parameters indicates a number of new vertices to be added to form ~~an adjacent primitive~~ a primitive adjacent to the originating primitive.
6. (Currently Amended) A method as in claim 1, wherein one of the parameters indicates a number of the vertices of the originating primitive to be used as anchor vertices for each adjacent primitive.
7. (Original) A method as in claim 1, wherein the parameters indicate a number of the vertices that are shared between two primitives.

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8. (Original) A method as in claim 6, wherein the parameters indicate a number of vertices in addition to the anchor vertices, needed to define an adjacent primitive.

Claims 9.-15. (Cancelled)

16. (Currently Amended) A method for generating a primitive extension, the primitive extension defining the connectivity and vertices used to specify a collection of connected primitives within a generalized primitive, comprising:

obtaining vertex data for an originating primitive;

generating an ordered data stream ~~from~~ including parameterizing the generalized primitive with parameters that include a width (w), a step size (s) and an anchor width (a):

~~the vertex data;~~

selecting a first portion of data from the ordered data stream, wherein the first portion of data includes vertex data for the originating primitive of the generalized primitive;

~~skipping a second portion of data immediately past the first portion of data in the ordered data stream; and~~

adding a ~~third~~ second portion of data to an end of the ordered data stream, wherein the second portion of data includes vertex data for vertices within one of the connected primitives.

17. (Currently Amended) A method as in claim 16, wherein the first portion of the ordered data stream includes at least one anchor vertex, ~~the at least one anchor vertex used to define each primitive within a generalized primitive~~ primitive.

18. (Cancelled)

19. (Original) A method as in claim 16, wherein the primitive extension includes vertex data for at least one adjacent primitive, ~~the adjacent primitive including vertex data from the first portion of data and the third portion of data.~~

20. (Currently Amended) A method as in claim 16, wherein the primitive extension is a strip or a fan.

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21. (Cancelled)
22. (Currently Amended) A method as in claim 16, wherein the primitive extension is generated by a primitive engine, and further comprising providing the primitive extension to a vertex engine.
23. (Original) A method as in claim 16, further comprising providing the primitive extension to a vertex engine.
24. (New) A method as in claim 1, wherein the generalized primitive parameters are provided through an application program interface (API).
25. (New) A method as claim in claim 1, wherein sufficient primitives in the generalized primitive are generated to approximately cover a surface.
26. (New) A method as claimed in claim 1, wherein the primitive exterior is output as a data stream comprising the data for each of the vertexes of the primitive extension.
27. (New) A method as claimed in claim 26, wherein for each of the vertices of the primitive extension the output data stream comprises one or more of w, s, and a.
28. (New) A method as claimed in claim 1, wherein the generalized primitive parameters further include vertex data that is provided using offset indexing to allow processing of the primitives in a consistent order.
29. (New) A method as claimed in claim 16, wherein a further connected primitive adjacent the original primitive and a connected primitive is defined including parts of the first and second portions of the ordered data stream.
30. (New) A method as claimed in claim 29, wherein for each of the vertices of the primitive extension the output data stream comprises one or more of w, s, and a.
31. (New) A method as claimed in claim 30, wherein the vertex data is provided using offset indexing to allow processing of the primitives in a consistent order.

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32. (New) A method as claimed in claim 16, wherein the anchor vertex is used to form a portion of the originating primitive and a portion of one or more of adjacent primitives.